WHAT IS CLAIMED IS

1. An electrostatic actuator for a contact probe storage device comprising:

a first electrode;

a second electrode supported in a predetermined spaced essentially parallel relationship with the first electrode by resilient members; and

a probe configured to engage a medium in which data indicative topographical features are formed, the probe being mounted on the second electrode so as to extend away from the first electrode, one of the first and second electrodes being configured to have a voltage selectively applied thereto to attract the first and second electrodes toward one another and move the probe away from the medium.

2. An electrostatic actuator as set forth in claim 1, wherein the first and second electrodes are configured to produce a capacitance which varies with the displacement of the probe with respect to the medium.

3. An electrostatic actuator as set forth in claim 1, wherein the second electrode is supported by a plurality of flexible extension members.

4. An electrostatic actuator as set forth in claim 3, wherein a first pair of the flexible extensions are configured to apply a voltage to the second electrode.

5. An electrostatic actuator as set forth in claim 4, further comprising a heater disposed on the second electrode, the heater being electrically isolated from the second electrode and electrically connected with a second pair of the flexible extensions which are configured to supply electrical current to the heater.

6. An electrostatic actuator as set forth in claim 3, wherein the flexible extension members are made of an electrically conductive material.

7. An electrostatic actuator as set forth in claim 3, wherein the flexible extension members each have an electrically conductive portion.

8. An electrostatic actuator arrangement for a contact probe storage device comprising:

a probe configured to engage a medium in which data indicative topographical features are formed; and

linear acting electrostatic motor means for selectively drawing the probe out of engagement with the medium.

9. An electrostatic actuator arrangement as set forth in claim 8, further comprising:

capacitor means for sensing displacement of a probe with respect to the medium which displacement is induced by engagement between the probe and a data indicative topographical feature.

10. An electrostatic actuator arrangement as set forth in claim 9, wherein the capacitor means and the linear acting electrostatic motor means commonly comprise:

a first electrode; and

a second electrode supported in a predetermined spaced essentially parallel relationship with the first electrode.

11. An electrostatic actuator arrangement as set forth in claim 10, wherein the second electrode comprises flexible support means for supporting the second electrode in the spaced essentially parallel relationship with the first electrode.

12. An electrostatic actuator arrangement as set forth in claim 11, wherein the flexible support means further comprise means for establishing an electrical connection with the second electrode.

13. An electrostatic actuator arrangement as set forth in claim 11, further comprising a heater supported on and electrically isolated from the second electrode and disposed proximate the probe.

14. An electrostatic actuator arrangement as set forth in claim 13, wherein the flexible support means further comprise means for passing electrical current to the heater.

15. A method of making an electrostatic actuator for a contact probe storage device comprising:

forming a first electrode on a base member which has supports formed thereon;

forming a second electrode which is configured to be supported by the supports on the base member so as to extend in a predetermined spaced essentially parallel relationship with the first electrode; and

configuring one of the first and second electrodes to have a voltage applied thereto which attracts the other of the first and second electrodes theretoward.

16. A method as set forth in claim 15, further comprising:

forming a probe which is supported on the second electrode and which is configured to engage a medium in which data indicative topographical features are formed; and

forming spacers which support the medium in a predetermined spatial relationship with the probe.

17. A method as set forth in claim 15, comprising:

forming a plurality of elongate flexures which each have an end supported by one of the supports, and which each have an end juxtaposed the second electrode;

configuring one pair of flexures to be integral with the second electrode and a second pair of flexures to be connected to the second electrode through an electrically insulative member; and

using the flexures to support the second electrode in the predetermined spaced essentially parallel relationship with the first electrode.

18. A method as set forth in claim 17, further comprising forming the flexures to be electrically conductive or to have an electrically conductive portion.

19. A method as set forth in claim 18, further comprising:

forming a heater on the second electrode;

electrically isolating the heater from the second electrode and configuring the heater to be electrically connected with the second pair of flexures.

20. A method as set forth in claim 16, further comprising configuring the first and second electrodes to form a capacitor wherein the change in distance between the first and second electrodes is measurable and usable as a signal indicative of the probe having engaged a data indicative topographical feature on the medium.

21. A contact probe storage device comprising:

a medium in which data indicative topographical features are formed; and

at least one electrostatic actuator which is configured so that the actuator and the medium are selectively movable relative to one another, the at least one actuator comprising:

a first electrode;

a second electrode supported in a predetermined spaced essentially parallel relationship with the first electrode by resilient members; and

a probe configured to engage the medium in which data indicative topographical features are formed, the probe being mounted on the second electrode so as to extend away from the first electrode, one of the first and second electrodes being configured to have a voltage selectively applied thereto to attract the first and second electrodes toward one another and move the probe away from the medium.

22. A contact probe storage device as set forth in claim 21, wherein the first and second electrodes are configured to produce a capacitance which varies with the displacement of the probe with respect to the medium.

23. A contact probe storage device as set forth in claim 21, wherein the second electrode is supported by a plurality of flexible extension members.

24. A contact probe storage device as set forth in claim 23, wherein a first pair of the flexible extensions are configured to apply a voltage to the second electrode.

25. A contact probe storage device as set forth in claim 24, further comprising a heater disposed on the second electrode, the heater being electrically isolated from the second electrode and electrically connected with a second pair of the flexible extensions which are configured to supply electrical current to the heater.

26. A contact probe storage device as set forth in claim 23, wherein the flexible extension members are made of an electrically conductive material.

27. A contact probe storage device as set forth in claim 23, wherein the flexible extension members each have an electrically conductive portion.